Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-19. (canceled)

20. (original) A kit comprising:

a first oligonucleotide primer comprising (i) a 3' terminal nucleotide sequence that anneals to a sample single-stranded nucleic acid molecule and serves as the origin of synthesis for synthesizing a first single-stranded nucleic acid molecule complementary at least in part to the sample single-stranded nucleic acid molecule, and (ii) a 5' terminal nucleotide sequence that is complementary to an arbitrary region of the first single-stranded nucleic acid molecule;

a second oligonucleotide primer comprising a nucleotide sequence which anneals to a region of the sample single-stranded nucleic acid molecule located 3' to where the first oligonucleotide primer anneals thereto;

a third oligonucleotide primer comprising (i) a 3' terminal nucleotide sequence that anneals to the first single-stranded nucleic acid molecule prepared using the first oligonucleotide primer and serves as the origin of synthesis for synthesizing a second single-stranded nucleic acid molecule complementary at least in part to the first single-stranded nucleic acid molecule, and (ii) a 5' terminal nucleotide sequence that is complementary to an arbitrary region of the second single-stranded nucleic acid molecule;

a DNA polymerase having strand displacement activity; and one or more nucleotides which are used by the DNA polymerase to extend the primers.

- 21. (original) The kit according to claim 20 further comprising:
 a fourth oligonucleotide primer comprising a nucleotide sequence which
 anneals to a region of the first single-stranded nucleic acid molecule located 3' to where the
 third oligonucleotide primer anneals thereto.
- 22. (original) The kit according to claim 20 further comprising:
 a detector for detection of a product of nucleic acid synthesis prepared using the remaining components of the kit.

23-53. (canceled)

- 54. (new) A method of synthesizing a nucleic acid molecule comprising:
- A) mixing the following components with sample nucleic acid as a template:

a first oligonucleotide primer comprising (i) a 3' terminal nucleotide sequence that anneals to a sample single-stranded nucleic acid molecule and serves as the origin of synthesis for synthesizing a first single-stranded nucleic acid molecule complementary at least in part to the sample single-stranded nucleic acid molecule and (ii) a 5' terminal nucleotide sequence that is complementary to an arbitrary region of the first single-stranded nucleic acid molecule;

a second oligonucleotide primer comprising a nucleotide sequence which anneals to a region of the sample single-stranded nucleic acid molecule located 3' to where the first oligonucleotide primer anneals thereto;

a third oligonucleotide primer comprising (i) a 3' terminal nucleotide sequence that anneals to the first single-stranded nucleic acid molecule prepared using the first oligonucleotide primer and serves as the origin of synthesis for synthesizing a second single-stranded nucleic acid molecule complementary at least in part to the first single-stranded nucleic acid molecule and (ii) a 5' terminal nucleotide sequence that is complementary to an arbitrary region of the second single-stranded nucleic acid molecule;

a fourth oligonucleotide primer comprising a nucleotide sequence which anneals to a region of the first single-stranded nucleic acid molecule located 3' to where the third oligonucleotide primer anneals thereto;

a DNA polymerase having strand displacement activity; and one or more nucleotides which are used by the DNA polymerase to extend the primers; and

- B) incubating the mixture at such a temperature that the nucleotide sequence constituting the first and third oligonucleotide primers can form stable base paring with the template.
- 55. (new) The method of claim 54, wherein the mixture further comprises a regulator for melting temperature.

- 56. (new) The method of claim 55, wherein the regulator for melting temperature is betaine.
- 57. (new) The method of claim 56, wherein 0.2 to 3.0 M betaine is present.
- 58. (new) The method of claim 54, wherein the mixture further comprises a detector for detection of a product formed by said mixing of step A) and said incubating of step B).
- 59. (new) The method of claim 54, wherein the sample nucleic acid is RNA, and the DNA polymerase has reverse transcriptase activity.